INL sposored the 2008 Oil Shale Symposium, which included a field trip to Colorado's Piceance Basin. INL researcher Carl D. Palmer inspected the kerogen-rich Mahogany Zone unit at ExxonMobile's Colony mine.

INL highlights Western Energy Corridor at Oil Shale Symposium

by Keith Arterburn, *INL Communications*

Idaho National Laboratory and the Western Energy Corridor Initiative (WECI) will help bring vast energy resources online in an environmentally and economically sustainable manner. INL is helping lead the initiative and described it last month at the 28th Annual Oil Shale Conference at the Colorado School of Mines in Golden, Colo.

INL sponsored this year's event, and more than a half dozen of its technical experts gave oral presentations, presented posters and chaired technical sessions. More than 350 representatives from 30 U.S. states and 15 countries participated.

Oil shale in Colorado, Utah and Wyoming — estimated to be greater than Saudi Arabian oil reserves — represents a potentially huge resource for the nation. Utah Gov. Jon Huntsman Jr. delivered a plenary presentation and emphasized the importance of developing these oil shale resources using environmentally sound processes.

"Utah is open to business as it relates to oil shale," he said.

The Western Energy Corridor is the region stretching from Colorado to Alberta and contains world-class reserves of oil shale, oil sands, coal, conventional oil, natural gas and uranium. It is sponsored by the Department of Energy's Office of Naval Petroleum and Shale Oil Reserves and is led by INL and Los Alamos National Laboratory with support from industrial partners.

Mike Hagood, INL's energy systems business development manager, introduced the initiative in INL's plenary presentation.

"A regional approach provides several advantages," Hagood said. "We can draw on the technical expertise from several industries and apply lessons learned from long-running activities such as the oil sands development in Alberta, Canada."

He described how hybrid energy systems are designed to integrate fossil, renewable and nuclear energy sources. These systems can be applied to provide more efficient use of resources and increase production of more valuable products within the region, he said. WECI seeks to help identify the best possible scenarios for energy development within the carrying capacity of the region while minimizing impact on the environment and local communities.

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INL researchers Tom Wood and Robert Podgorney also presented a display about WECI and INL's oil shale work. In separate technical sessions, INL researchers Carl Palmer, Earl Mattson and Hai Huang shared research results on: how water quality changes as shale is heated to form oil; the role of water in hydrocarbon generation; and modeling the fracturing of oil shale and expulsion of the resulting hydrocarbons from the rock matrix. INL researcher Ryan Hruska discussed INL's Geographic Information Systems work during a lively poster session.

INL researchers continue to build collaborations with regional universities and research organizations and to provide government agencies basic research on environmentally acceptable development. They also are expanding INL's business opportunities with energy development companies operating in the Western Energy Corridor.

"INL's sponsorship and exceptional performance during this conference further establishes the laboratory as a key player in the development of unconventional fossil energy," Hagood said. "Regional universities, federal agencies and industry are beginning to recognize INL's research capabilities and talents for furthering the development of oil shale as an energy source."

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